

## WHAT I CLAIM IS:

1. A method of accessing an authentication function for use in an H.323 communications network comprising the steps of:

associating an authentication function with an H.323 home gatekeeper,  
 in response to an authentication request message from said gatekeeper, comparing said authentication request with H.323 mobile entity data,  
 in the event that authentication of said H.323 mobile entity is confirmed, outputting an authentication confirmation message to said gatekeeper, and  
 in the event that authentication of said H.323 mobile entity is rejected, outputting an authentication rejection message to said gatekeeper.

2. A method of accessing an authentication function as recited in claim 1 comprising the preliminary steps at said gatekeeper of

periodically transmitting a mobility gatekeeper advertisement message and  
 receiving a response from an H.323 mobile entity indicating a move from a first point of attachment to a different point of attachment to an H.323 communications network.

3. A method of accessing an authentication function as recited in claim 1 wherein said authentication function comprises

identifying said mobile entity by its unique identification,  
 determining a service requested by said mobile entity, and  
 confirming said mobile entity to receive said requested service according to terminal profile data if said mobile entity is authenticated and rejecting said mobile entity to receive said requested service if said mobile entity is not authenticated.

4. A method of accessing a home location functionality for H.323 mobility management comprising the steps of

periodically transmitting a mobility gatekeeper advertisement message,

receiving a response from an H.323 mobile entity indicating a move from a first point of attachment to a different point of attachment to an H.323 communications network,

responsive to said move, outputting a visiting network location update request message from an H.323 home gatekeeper to said home location functionality and

in the event said update is successfully accomplished, receiving a visiting location confirmation message at said H.323 home gatekeeper.

5. A method of accessing a home location functionality as recited in claim 4 wherein said different point of attachment is in a different administrative domain and said home location functionality is centralized for a plurality of H.323 home gatekeepers associated with different administrative domains.

6. A method of accessing a home location functionality as recited in claim 4 wherein said home location functionality is distributed, there being a home location functionality associated with each H.323 gatekeeper in an administrative domain.

7. A method of accessing a visitor location functionality for inter-zone H.323 mobility management comprising the steps of

periodically transmitting a mobility gatekeeper advertisement message,

receiving a response from an H.323 mobile entity indicating a move from a first point of attachment to a different point of attachment in a visiting administrative domain of an H.323 communications network,

responsive to said move, outputting a visiting network location update request message from an H.323 visiting gatekeeper to a visiting visitor location functionality associated with said H.323 visiting gatekeeper,

in the event said update is successfully accomplished, receiving a visiting location confirmation message at said H.323 home gatekeeper

outputting a request to a home zone H.323 gatekeeper to request a binding home confirmation for said move and

in the event of the home H.323 gatekeeper's updating an associated home location functionality, receiving a binding update confirmation message at said visiting H.323 gatekeeper.

8. A method of accessing a visitor location functionality as recited in claim 7 further comprising the steps of

said home zone H.323 gatekeeper outputting a visiting network location update request message from an H.323 home gatekeeper to said home location functionality and

said home location functionality being centralized for a plurality of H.323 home gatekeepers associated with different administrative domains.

9. A method of accessing a visitor location functionality as recited in claim 7 further comprising the steps of

said home zone H.323 gatekeeper outputting a visiting network location update request message from an H.323 home gatekeeper to said home location functionality and

said home location functionality being distributed among a plurality of H.323 home gatekeepers associated with different administrative domains.

10. A method of accessing a visitor location functionality for inter-zone H.323 mobility management comprising the steps of

periodically transmitting a mobility gatekeeper advertisement message,

receiving a response from an H.323 mobile entity indicating a move from a first point of attachment to a different point of attachment in a visiting administrative domain of an H.323 communications network,

responsive to said move, outputting a visiting network location update request message from an H.323 visiting gatekeeper to a visiting visitor location functionality associated with said H.323 visiting gatekeeper,

in the event said update is successfully accomplished, receiving a visiting location confirmation message at said H.323 home gatekeeper

outputting a request to a home zone H.323 gatekeeper to request a binding home confirmation for said move substantially simultaneously with a request to a visited zone H.323 gatekeeper to request an unbinding visited confirmation and

in the event of the home H.323 gatekeeper's updating an associated home location functionality, receiving a binding update confirmation message at said visiting H.323 gatekeeper.

11. A method of accessing a visitor location functionality as recited in claim 10 further comprising the steps of

said home zone H.323 gatekeeper outputting a visiting network location update request message from an H.323 home gatekeeper to said home location functionality and

said home location functionality being centralized for a plurality of H.323 home gatekeepers associated with different administrative domains.

12. A method of accessing a visitor location functionality as recited in claim 10 further comprising the steps of

said home zone H.323 gatekeeper outputting a visiting network location update request message from an H.323 home gatekeeper to said home location functionality and

said home location functionality being distributed among a plurality of H.323 home gatekeepers associated with different administrative domains.

13. A method of accessing a home location functionality for inter-zone H.323 mobility management comprising the steps of

periodically transmitting a mobility gatekeeper advertisement message,

receiving a response from an H.323 mobile entity indicating a move from a first point of attachment to a visiting point of attachment to an H.323 communications network,

responsive to said move, outputting a binding location update request message from an H.323 visiting gatekeeper to a centralized home location functionality and

in the event said update is successfully accomplished, receiving a visiting location binding confirmation message at said H.323 visiting gatekeeper.

14. A method of accessing a home location functionality for inter-zone H.323 mobility management comprising the steps of

periodically transmitting a mobility gatekeeper advertisement message,  
receiving a response from an H.323 mobile entity indicating a move from a first point of attachment to a visiting point of attachment to an H.323 communications network,

responsive to said move, outputting a location update request to a visiting visitor location functionality associated with a visiting zone H.323 gatekeeper

outputting a binding location update request message from said visiting visitor location functionality to a centralized home location functionality and

in the event said update is successfully accomplished, receiving a visiting location binding confirmation message at said visiting visitor location functionality.

15. An H.323 mobility management system comprising

a home H.323 gatekeeper having an associated authentication function and for periodically transmitting mobility gatekeeper advertisement messages and, responsive to a move of an H.323 mobile entity from one point of attachment to another, querying said associated authentication function for authentication of said H.323 mobile entity that has moved.

16. An H.323 mobility management system as recited in claim 15 wherein said associated authentication function includes an H.323 mobile entity database for storing a profile of service providers, services subscribed-to and credit-worthiness rating for each H.323 mobile entity.

17. An H.323 mobility management system comprising

a home gatekeeper and a visiting gatekeeper, said visiting gatekeeper for periodically transmitting mobility gatekeeper advertisement messages, and, responsive to a mobile H.323 entity moving into a visiting zone, communicating with a home location functionality associated therewith and

said home location functionality associated with said visiting gatekeeper.

18. An H.323 mobility management system as recited in claim 17 wherein said home location functionality includes an H.323 mobile entity database for storing for H.323 mobile entity network, visiting zone and point of attachment data for said H.323 mobile entity.

19. An H.323 mobility management system comprising

a home gatekeeper and a visiting gatekeeper, said visiting gatekeeper for periodically transmitting mobility gatekeeper advertisement messages, and, responsive to a mobile H.323 entity moving into a visiting zone, communicating with a home location functionality associated therewith and

said home location functionality being centralized and associated with said home gatekeeper and said visiting gatekeeper.

20. An H.323 mobility management system as recited in claim 19 wherein said home location functionality includes an H.323 mobile entity database for storing for H.323 mobile entity network, visiting zone and point of attachment data for said H.323 mobile entity.